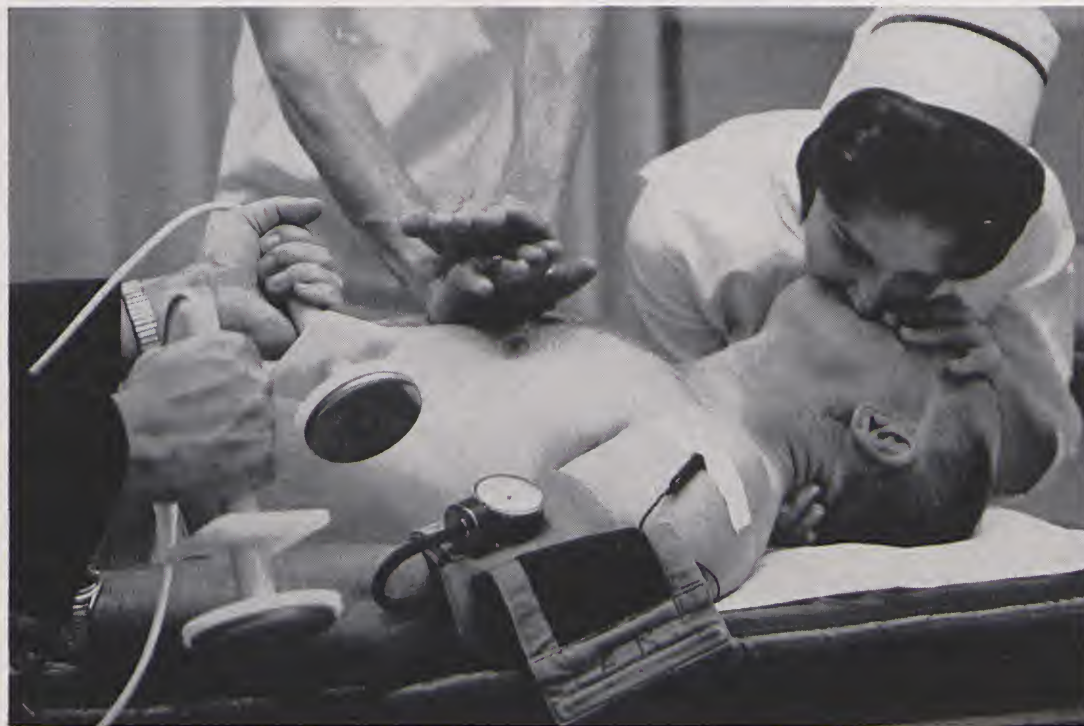


# CLINICAL **NEWS** CONGRESS

AMERICAN COLLEGE OF SURGEONS

Founded by Surgeons of the United States and Canada, 1913

SAN FRANCISCO, TUESDAY, OCTOBER 11, 1966



In Archer S. Gordon's film to be premiered this morning, nurse resuscitates patient as intern compresses the heart. Doctors stand by with the DC external defibrillator electrodes ready should they find it necessary to apply them to the patient. Other films to be shown today and tonight are listed on pages 105-108 of Congress Program.

## Hospital-Based Diploma Schools of Nursing Get Strong College Support

In a joint statement the Board of Regents and the Board of Governors yesterday strongly urged support of hospital-based diploma schools of nursing because "their discontinuance at this time will compound the shortage of nurses."

At a press conference Regent Paul C. Samson, Oakland, and E. Lee Strohl, Chicago, vice chairman of the Governors, issued the following official statement of the College:

"The American College of Surgeons is concerned over the aggravation of the shortage of nurses occasioned by the closing of many hospital-based diploma schools of nursing before sufficient alternative educational opportunities become available or educational programs for supplementary personnel in the field of patient care are developed.

"Diploma schools account for the vast majority of new nurses each year. At this time 68.8% of our nursing schools are diploma schools, and in 1965 the diploma schools graduated 27,645 of a total of 34,686 nurses, representing nearly 80% of the graduating nurses.

"The American College of Surgeons strongly urges support of the existing nursing educational programs, as their discontinuance at this time will compound the shortage of nurses."

Dr. Samson explained to the press that in the last four years 95 hospital-based diploma schools have closed for various reasons and that 61 others now are considering closing. At present, he said, there are 821 diploma schools out of a total of 1,193 schools of nursing.

Doctor Strohl added that despite the increase in the number of graduates of baccalaureate (collegiate) schools and associate-degree schools, there has been such a marked decrease in diploma-school graduates that the end result has been a decline of more than 500 nursing graduates each year.

## Ultrasound Used to Diagnose Lung Clot

Ultrasound—high frequency sound beyond the hearing capability of the human ear—has been used to quickly and painlessly diagnose lung clots, a group from the University of Pennsylvania reported Monday to the Surgical Forum.

In 15 patients tested at the time of the report, accuracy was 100%. Verification was obtained by radioactive isotope scans, by operation or by autopsy.

Preliminary studies also were carried out on 22 dogs in which accuracy was greater than 99%, based on 180 total test sites.

The report was presented by Stanley J. Dudrick, Claude R. Joyner, Leonard D. Miller, David J. Eskin, and David H. Knight.

Ultrasound, employing the principle of the timed echo, or sonar, also has been successfully used in recent years to detect heart defects, space-occupying lesions in the skull and to measure fetal head size.

"It would appear that reflected ultrasound may prove of value in the early clinical diagnosis of pulmonary embolism," the authors said. "The characteristic echogram associated with pulmonary embolism occurs within minutes of embolization, in the absence of routine

chest radiographic evidence of pulmonary infarction.

"The examination can be performed at the bedside in five or 10 minutes and the patterns interpreted immediately.

"The speed of the study, the portable instrumentation, the minimal inconvenience to the patient (of the order of magnitude of an electrocardiogram), the simplicity of performance of the examination, and the immediate interpretation of the tracings are features which make this a particularly valuable adjunct to the diagnosis of pulmonary embolism."

A mechanical assist can be provided to the failing heart without opening the chest.

The technique has been used at Misericordia Hospital, Bronx, in patients who either have had a heart attack or who required emergency or urgent major surgery but did not have a strong heart.

The left ventricle, main pumping section of the heart, is safely bypassed by inserting two cannulae: one goes through the internal jugular vein and into the left atrium of the heart; the other is inserted into a thigh artery.

Richard R. Cappelletti, Michael M. Marrone,

(Continued on Page 3)

### NEW YORK HOSPITAL ALUMNI

New York Hospital medical alumni are invited by Preston A. and Mrs. Wade for cocktails today at 6, at the Fairmont. (Announcement in Monday edition of this paper referring to these alumni as being from Cornell was editor's error. Announcement should have read "New York Hospital Alumni . . .").



## 20 New Films Featured This Year by Cine Clinics; First This Morning Is Mesenteric Caval Shunt

First of the new Ciné clinic films will be shown at 8:30 A.M., today in the Arena of the Civic Auditorium. It is one of six to be run this morning and among 20 to be shown today through Thursday.

Depicting mesenteric caval shunt for extrahepatic obstruction performed by George D. Zuidema, Baltimore, the film depicts both operative technique and patient care. Marshall J. Orloff, Torrance, Calif., will discuss the technique.

Presiding at this morning's session will be Warren H. Cole, Chicago.

This year's films are the newest additions to the 314 produced and distributed in co-operation with the College by Davis & Geck, Division of American Cyanamid Co., Danbury, Conn., since 1950. Say the producers, "The care exercised by the Motion Picture Committee and the Board of Regents in the selection of the authors is amply illustrated by the continuing demand for the Ciné Clinic films and by the grand total of 180,682 bookings of these films during the 15 years which they have been available."

In addition, the Davis & Geck surgical film team have produced 14 films on operating room technique. These films are designed primarily for nurses. Latest on the list is "The Unsterile Field—An O.R. Challenge."

The author of every Ciné Clinic is present at the showing to narrate in person, converse with the discussor, and answer pertinent questions.

The College man most behind the Ciné Clinics all these years has been Hilger Perry Jenkins, Chicago. As chairman of the A.C.S. Medical Motion Picture Committee, he has personally persuaded more than 200 surgeons to take part in the program. His most convinc-



In this clip from George D. Zuidema's film, opener on today's Ciné Clinic series, surgeon is completing end-to-side anastomosis in mesenteric caval shunt.

ing argument is that by committing their techniques to film they make possible the learning of these techniques by thousands of their colleagues.

Dr. Jenkins has also helped participants in adopting the usually-strange-to-them techniques of appearing and speaking before the camera.

His committee is responsible for the showing, altogether, of 103 motion pictures at this Clinical Congress.

A complete listing of the Ciné Clinics and motion picture programs, in booklet form, is available at entrances to the theatre-rooms—Larkin Hall and the Arena in the Civic Center, and Grand Ballroom, Fairmont—as well as at Registration and at Davis & Geck's exhibit, Booth 235.

This year's program booklet, incidentally features some of the historically-reconstructed photographic reproductions taken especially for Davis & Geck by artist-photographer Lejaren A. Hiller. Twenty of these in the series, "Sutures in Ancient Surgery," are hanging this week in Brooks Hall.

## Premiere of Four Breast Cancer Films Is Set for Wednesday

On Wed., Oct. 12, at 9 A.M. in Larkin Hall, a new integrated series of four films on carcinoma of the breast will be shown for the first time.

Their titles, says Francis D. Moore, Boston, who is the teacher in what is known as "The Surgical Residency Series of Teaching Motion Pictures," to which the four are the latest addition, are: *Biopsy of the Mass*; *Choice of Primary Treatment and the Place of Radical Mastectomy*; *Radical Mastectomy and Postoperative Treatment*; and *The Advanced Disease—Endocrine Management and Adrenalectomy*.

These movies, filmed in Boston, under the direction of Dr. Moore, include both operative technique and statistical analysis.

The films were produced by Sturgis-Grant Productions, New York. They were financed by Winthrop Laboratories, New York (Booth 529, Brooks Hall).

## Flying Physicians at Trader Vic's

The Flying Physicians Association will have cocktails tonight (Tuesday) from 7 to 8, and dinner at 8, at Trader Vic's, San Francisco. This is a change from information sent to members by mail. Charge: \$10, not including cocktails, says Mrs. Mark Kochevar, wife of president.

## Washington U.

Faculty, staff, wives, husbands and friends are invited by alumni to Washington University's social hour tonight (Tuesday) at the Kaleidoscope Room at the Hilton. Time: 5:30 to 7:30. Cash bar.

## The Virginians

University of Virginia alumni continue their four-part party tonight, Wednesday, and Thursday, at the Hopkins. Each session begins at 6:30, says William Booth. Dr. Booth is at the registration area in Brooks Hall each day from 8 A.M. to 5:30 P.M. with additional information for the Virginians. This continuing party represents a change from the previously announced reception scheduled for Wednesday.

## Louisville U.

University of Louisville alumni will meet Tues., Oct. 11, 7:30 P.M., in Room 1005, Fairmont Hotel, cocktails. This will be followed by dinner at Yamato Restaurant, 717 California St. Wives are invited.

## Eiseman and Blue Fox

The Ben Eiseman dinner will be at the Blue Fox Wine Cellar, Wed., Oct. 12 at 7:30 to ? (anybody's guess, says William G. Mallette).

## Navy Surgeons

Navy surgeons will give a "no-host" cocktail party at the Marines' Memorial Club, Mason and Sutter Sts. in the main ballroom, Wed., Oct. 12, from 7 to 10 P.M.

## Altemeier Trainees

Former residents of William Altemeier, Cincinnati, will honor their teacher at an annual reunion dinner at Rocco's, 555 Golden Gate Ave., at 7 P.M., Wed., Oct. 12. Persons interested in further information may get in touch with William R. Cole. (Sorry we don't know where Dr. Cole is.)

## Michael Reese

Michael Reese alumni will meet for luncheon at the Clift Hotel on Wed., Oct. 12, at noon. Alumni interested in further information may get in touch with Morris L. Parker, same hotel.

## 165th General Hospital

165th General Hospital surgeons formerly assigned to the Fighting 165th (mostly among themselves, says Frank H. Kidd; Dallas,) will lunch together Thursday noon. Exact time and place will be selected after number attending is determined. Communicate with Dr. Kidd, Room 922, St. Francis Hotel, or leave message at Exhibit S-4 in Brooks Hall, Civic Auditorium. "Come see the ageless Col. Roswell K. Brown and Col. Jim Spencer," who are holding forth at S-4, Dr. Kidd advises.

## Iowans' Party Wednesday

University of Iowa alumni will meet Wed., Oct. 12, in the Walnut Suite at the Hilton, 5 to 8 P.M.

## Toledo and Maumee Alumni

All Toledo surgeons and Maumee Valley Hospital alumni are invited to cocktail party at the Hilton, Thurs., Oct. 13, 6 to 8, in room 1827-G. Information comes from J. C. Rosenberg.

## American Surgical Committee

Advisory Membership Committee of American Surgical Association is to meet Wed., Oct. 12, at 8:50 A.M. in the Argonaut Room at the Mark Hopkins.

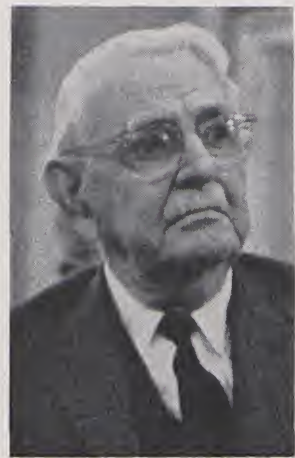
## International College of Surgeons

Luncheon will be served on Wed., Oct. 12, in the Hilton's North Continental Parlor and Ballrooms VII, VIII and IX, to members of the International College of Surgeons. Its headquarters is 1516 N. Lakeshore Dr., Chicago.



## Isidore Cohn Receives National Safety Award

Isidore Cohn, emeritus clinical professor of surgery at the Louisiana State University School of Medicine, last night received the National Safety Council's 1966 Surgeons' Award for Distinguished Service to Safety.



Dr. Cohn

The award was presented to Dr. Cohn at the Committee on Trauma's annual dinner. It was presented by Earl Campbell, former executive director of the California Traffic Safety Foundation.

The Surgeons' Award is presented annually to honor a surgeon or a surgical organization for outstanding contributions to the prevention or treatment of accidental injuries.

This year's award cites Dr. Cohn as "A patriarch in the care of traumatic injuries; a scholar and teacher respected by his colleagues; a gentle gentleman beloved by all who are privileged to know him."

Dr. Cohn for many years has been a leader in the teaching and practice of the surgery of trauma, as well as the promulgator of legislation designed to prevent accidents.

He planned and obtained adoption of the first state ambulance law in the United States in Louisiana in 1938. As transportation committee chairman of the A.C.S. Committee on Trauma Dr. Cohn has contributed many refinements to the handling and transportation of the injured.

Dr. Cohn has been a member of the A.C.S. Committee on Trauma since 1929.

His other memberships include the American Association for the Surgery of Trauma, the American Medical Association, the Society of Endocrinology, the Society for Experimental Biology and Medicine, the Société Internationale de Chirurgie, the Southern Medical Association and the Southern Surgical Association. He is an Honorary Fellow of the Peruvian Association of Surgery.

### At Chapter Exhibit, S-6

J. T. Davis, Corinth, Miss., will be at A.C.S. chapter exhibit, S-6, Brooks Hall, from 8:30 A.M. to 10:45 today to tell inquirers how the Mississippi Chapter became successful.

## Wireless 'Micropacer' Told at Forum

(Continued from Page 1)

and Benedict M. Reynolds, made their report to the Surgical Forum yesterday. They used the left ventricular bypass (LVP) in three patients, ages 76, 73, and 57, with severe heart disease who needed support for urgent major abdominal surgery. Three others, ages 55, 86 and 72, had a bypass as part of their treatment for acute heart attack with shock.

In the first group, one of the three died of pneumonia two months afterward. The other two are alive and well. In the second group, two were successfully taken off the support but died within 24 hours. The third could not be but died after eight hours of support.

"While the end results of LVP for patients with myocardial infarction and shock are at present unsatisfactory, it is felt the prolonged period of shock prior to institution of LVP is one of, if not the major factor of failure of treatment," the authors said. "All patients responded quite well to the LVP procedure within one hour of institution, regardless of their deteriorated state."

A totally implantable heart pacemaker without any wire electrodes was described Monday by a group of Italian investigators. Silastic-coated, it attaches to the heart muscle by means of a Dacron patch.

Leonardo Cammilli and his associates, Renato Pozzi and Giorgio De Saint Pierre of Arcispedate Santa Maria Nuova, Florence, Italy, said the device has been used on 51 patients. Their report, however, was confined to animal experiments.

The wireless "micropacer" stores its own electricity, but must be recharged from the outside every 15 days by radio waves.

Electrodes are permanently implanted into the heart muscle. Their stimulation rate is fixed but may be changed by the application on the chest of a special radio transmitter.

Pacemakers have been used for several years to correct heart block. The most commonly used ones have fragile electrodes that pierce the skin to the outside, besides strapped-on batteries that run down.

### 2nd Approach Outlined

Another approach, the results of three years' work in developing a battery-less, biological source of power for cardiac pacemaker, was outlined Monday by J. A. Armour, Banting Institute, University of Toronto.

The concept relies on dissimilar electrodes which generate an electrical output. The design incorporates the principle that a minimum of current insures greater longevity and stability.

Complete heart block was created in dogs. Electrodes then were placed in the abdominal wall and other electrodes were sutured to the heart. Most satisfactory were silver chloride and zinc electrodes. They produced a potential of 1 volt, which could be raised to 4 volts with a miniature step-up transformer.

Ventricular pacing has lasted up to 19 weeks.

Associated with Dr. Armour were O. Z. Ree, W. B. Firor, R. W. Wehnert, D. C. MacGregor, K. Sindhvananda and Wilfred G. Bigelow.

### Predicts Artificial Heart

In another report, an engineer who has worked on the problem for three years says a mechanical heart can be achieved within a year in animals—if new engineering know-how, materials, and techniques are put to work.

Adiar Rogers, department of surgical research, University of Pennsylvania Medical School, said the design requirement accepted is an artificial heart, fully implanted, with automatic controls capable of duplicating the function of the natural heart.

Simple hydraulic fluid for power transmission and automatic control feedback signal is considered essential, he said.

The entire prosthesis must be implanted within the body. Only a tube and wire for electrical supply should appear outside the body.

A prototype has been built and tested, he revealed. Over the last two years it has simulated blood circulation in artificial circuits designed to duplicate human circulation.

Associated with Rogers in making the report were Kirkley R. Williams, and Livingston B. Morris, a mechanical engineer.

### SPECIAL BUSES

Surgeons and their wives staying in the Oakland, East Bay, peninsula, and airport areas can use the following special courtesy bus service, according to Edward G. Sandrok, A.C.S. business manager.

#### OAKLAND AND EAST BAY AREA

From Leamington Hotel, 19th and Franklin Sts., Oakland, to Civic Auditorium:

Lv. 8:00 a.m.

Lv. 9:00 a.m.

Fairmont Hotel to Leamington Hotel:

Lv. 5:00 p.m.

Lv. 6:30 p.m.

Leamington Hotel to Fairmont Hotel:

Lv. 5:30 p.m.

Lv. 7:00 p.m.

Fairmont Hotel to Leamington Hotel:

Lv. 10:30 p.m.

Lv. 11:30 p.m.

#### AIRPORT AND PENINSULA

S. F. International Airport and peninsula buses will leave El Rancho Motel at 7:15 a.m. and 8:30 a.m. and will pick up at: Hyatt House, Thunderbolt, Hilton Inn, Imperial 400, and Holiday Inn, to arrive at Civic Auditorium at approximately 8 a.m. and 9:15 a.m. respectively.

Buses will leave the Fairmont at 5 p.m. and 6:30 p.m. to return to: Holiday Inn, Imperial 400, Hilton Inn, Thunderbolt, Hyatt House and El Rancho. Returning to the Fairmont, buses will leave El Rancho at 5:45 p.m. and 7:15 p.m., picking up at same motels. Then, at 10:30 p.m. and 11:30 p.m. buses will leave the Fairmont to return to these same motels.

Registration badge is the ticket required for these American College of Surgeons buses.

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# Life Among the Surgeons, for Real, Every Day on Color TV

"Welcome to heart central at Palo Alto," says the muffled voice.

It is that of Norman E. Shumway, draped in his grey surgical gown which matches his hair color. He is standing over his patient in an operating room at Palo Alto-Stanford Hospital.

Some miles up the peninsula in a huge room made into a theater—Polk Hall in the Civic Auditorium—thousands of pairs of eyes watched the billboard-sized screen intently. There in living, throbbing color (thanks to the courtesy and goodwill of Smith Kline & French Laboratories) is an image of the human heart.

The heart belongs to a 55-year-old man, nameless, through necessity, to this surgical audience. He is, Dr. Shumway explains, in his casual manner, a power lineman who had suffered shortness of breath for four months, night dyspnea, and other serious symptoms of heart disease.

A thorough physical examination of this otherwise healthy-appearing man showed no trace of heart failure. But he had been afflicted for a couple of decades with a rheumatic-type arthritis and Dr. Shumway suspected he had rheumatic fever which perhaps damaged his heart valves and brought on his present difficulties.

And there, Monday morning, thanks to the miracle of projected color TV, an attempt to heal the man with a surgeon's skill and a ball valve is up to the microscopic scrutiny not only of the assembled miscellaneous surgeons, but to a panel of hypercritical fellow heart surgeons as well.

The panel sits in a remote room in the Auditorium in San Francisco and appears from time to time on the righthand screen, while the throbbing heart and gloved hands appear on a separate screen on the left. And during the hour-and-a-half of surgical fun-and-games, comments scholarly and droll pass down to Palo Alto and back. And it is very reminiscent, indeed, of the expert banter that electronically darts between Gemini Control and the astronauts with the public at large eavesdropping via their TV sets. So it is with medical color TV and so Dr. Shumway's opening remark is entirely fitting, indeed.

He explains further that his patient (of whom he will display only his ultimate organ of life) had a normal heartbeat of 76/min, a clear chest, but an overly large left ventricle.

Thus, it all adds up: the patient is ready for open-heart surgery and he needs it.

Throbbing in firm, pulsating, tightening, almost spastic contractions, the heart in question is ready.

But first the surgeon introduces his assistants: his gloved finger points around the screen to voices and bodyless hands that would from time-to-time come on the screen.

"Big clamp, please," says Dr. Shumway. He explains that he will in a few moments put the patient on a heart-lung machine. To his sophisticated colleagues he needn't explain that this

machine will take over for the next 45 minutes for the patient the functions of his heart and lungs. In fact, this marvelous machine never even appears on the screen.

"I don't think I'll perfuse this man." He explains that the patient was in otherwise good physical condition and so he doesn't feel that it is necessary to pump blood or saline solution through the coronary arteries that feed the heart itself.

That sets off quite a discussion among the panel of experts: C. Walton Lillehei, Minneapolis; Dwight C. McGoon, Rochester, Minn.; and Howard D. Sirak, Columbus. After some discussion, the moderator, Gilbert S. Campbell, Little Rock, offers, "It's a good thing Dr. Shumway didn't take a vote, as he'd be in the minority. But he is operating and he'll do what he thinks is right and that, as we say, is fair."

On the screen now, the patient hooked into the machine, a scalpel is held poised over the wrist-thick aorta.

"This may be messy for a while," warns the surgeon holding the scalpel. Then he quickly pushes its sharp point into that major blood vessel and the bright red blood gushes out and momentarily covers the heart. The blood is sucked away by a drain, but the heart isn't the same.

"Notice how the heart disappears as it decompresses."

Empty of blood, and not needed for the next hour or so, the heart no longer throbs.

The screen suddenly turns grey as the head of an assistant sweeps in front of the camera, which is mounted high above the operating table, in the lights.

Comment by the moderator, Dr. Campbell: "Say, Norm, your intern: if he were microcephalic, it would help!"

The scalpel has now cut deep into the aorta and the diseased, whitish valve is in big and clear view on the screen. Dr. Shumway shows its pleats, evidence of the disease which has destroyed its function.

His curved needle, gripped by the thin jaws of a forceps, sews long and black sutures into the white ring where the natural valve was rooted just minutes before. The needle repetitively jabs through the white, then draws up the thread, and moves over.

"Notice that this tissue is firm. Good stuff to sew through." That is Shumway's voice.

"Say, Norm," comments Campbell. "How about the use of a homograft for a case like this?" Shumway sidesteps by saying he's never had much experience with these preserved human heart valves taken from fresh cadavers. Lillehei comments for a few minutes (while the curved needle sews on). He's against them because each is dead tissue and like leather and thus liable to wear out.

Another panelist asks Shumway how many sutures he'll use and he answers: "21."

There is more talk about the cool saline pool in which the lineman's heart is now immersed and about his rectal temperature (34° C.) and about the oxygen and nitrous oxide anesthesia.

Shumway comments, "Say, that reminds me. We have to be careful what we say. Our anesthesiologist carries his patients so light that they can hear what goes on during the surgery."

But the mild warning stops none of the light conversation about the serious surgery.

The mattress stitching into the lumen finishes. Before, he had sized the hole with a round disc attached crosswise to a rod thrust into the lumen. It is the same diameter as a heart valve. "This is a size 13," says Dr. Shumway. "Let's try a 12." It is too small.

"Now," says Dr. Shumway, "we'll try the fitting again with an actual ball valve." He thrusts the dull white ball (caged by three shiny metal bars) into the lumen. "Good," he says.

Now the same interminable stitching continues. This time the long ends of the black sutures are stitched into the Dacron collar of the ball valve.

"When this is done, the valve will be shoved into place. I mean, it will be lowered into position gently." That's Shumway's humor again.

Finally the stitching is done and the 21 black sutures connecting the valve collar to the old aorta valve rim look like a guitar-maker's nightmare. But the valve is lowered into place and the sutures are pulled taut and tied.

"How many knots do you use, Norm?" A panelist.

"I don't know. Six or seven. I lose track. I keep tying until I feel all right about it." Shumway.

The knots are all tied and the valve that will regulate the flow of blood from the lineman's heart (as his own valve couldn't) is about ready. It's 41 minutes since the TV program began. Snip. Snip. The sutures are cut close to those discussed knots.

"Now we look past the valve to make sure no loops are under. I can see past the valve, although I don't know if the camera can."

"Take the ball out, Norm," a panelist quips. "No, we leave it in there as a training aid," is Dr. Shumway's answer.

Now it's 55 minutes and the incision that opens the aorta is being stitched shut.

"Would you describe that as a transverse incision, Norm?" A panelist.

"No, it's diagonal. But not like a hockey stick," is his answer.

Now the aorta is tightly sealed again by two overlapping rows of sutures. You can see the chest heave as the anesthesiologist starts squeezing the breathing bag again.

Sixty-one minutes. The white rubber-gloved hand holds the lineman's heart and squeezes. "I'm trying to melt any air out of the atria and ventricles and to keep the ball in motion," Shumway explains.

The heart is shivering in fibrillation. Two metal plates attached to two wooden handles are placed on the sides of the heart.

"Hit it!" orders Dr. Shumway. A jolt of direct current electricity jabs the heart, to start it beating regularly again. It takes several tries to do this. "That's better."